

Webtable 1. Overview of identified mechanisms linking reproductive and maternal health to WASH exposures and types of evidence identified

#	Mechanism	Agent(s)	Evidence from systematic reviews		Other evidence		No evidence
			Reproductive and Maternal	Foetus and Neonate	Reproductive and Maternal	Foetus and Neonate	
A. Water-borne chemical compounds: Chemical elements/compounds contaminate water and are ingested or contact skin							
1. Natural contaminants							
1	Arsenicosis	Arsenic					
2	Fluorosis	Fluoride					
3	Salinity	Salt (NaCl)					
4	Water hardness	Calcium and magnesium levels					
2. Industrial, agricultural and human-produced contaminants							
5	Metal poisoning	Aluminium, lead, manganese, mercury, potassium, silver, thallium, zinc, etc.					
6	Other inorganic compounds	Asbestos, cyanide, selenium, sulphate					
7	Nitrate/nitrite poisoning	Fertiliser and human waste					
8	Pesticides and herbicides	Agricultural runoff					
9	Pharmaceuticals and personal care products	Anthropogenic chemical contaminants in freshwaters and wastewaters					
3. Deliberate additives (substances added to water for public health purposes and their by-products)							
10	Disinfectants and disinfection by-products	Chloroform, bromoform, bromodichloromethane and chlorodibromomethane					
B. Water-systems related: Poorly managed water-systems spread contaminated aerosols (air conditioning systems)							
11	Legionellosis	Legionellae bacilli					
C. Water-based: Life-cycle of infective agent requires an aquatic vector and infection is transmitted through dermal contact with or ingestion of contaminated water							
1. Crustaceans							
12	Dracunculiasis	Dracunculus medinensis - guinea worm					
2. Fish							
13	Diphyllobothriasis	Diphyllobothrium - tapeworm					
3. Shellfish							
14	Flukes	Clonorchiasis, Opisthorchis viverrini					
4. Snails							
15	Schistosomiasis	Schistosoma mansoni and others					
16	Fasciopsiasis	Fasciolopsis buski					
D. Water-borne infections: Water is passive vehicle for infective agent. Transmission by consuming contaminated water or by faecal-oral route							
1. Bacterial infections							
17	Salmonellosis	Salmonella enterica					
18	Listeriosis	Listeria monocytogenes					
19	Typhoid fever	Salmonella typhi					
20	Campylobacter enteritis	Campylobacter jejuni					
21	Cholera	Vibrio cholera					
22	Melioidosis	Burkholderia pseudomallei					
23	Acute (bloody) diarrhoea	Escherichia coli					
24	Shigellosis	Shigella					
25	Yersiniosis	Yersinia					
2. Viral infections							
26	Hepatitis E	Hepatitis E virus					
27	Hepatitis A	Hepatitis A virus					
28	Gastroenteritis	Rotavirus					
29	Gastroenteropathy	Norwalk-like viruses					
30	Poliomyelitis	Poliovirus					
31	Myalgia	Group B coxsackie viruses					

3. Parasitic infections							
32	Hookworm disease	Ancylostoma duodenale, A. Ceylanicum and others					
33	Toxoplasmosis	Toxoplasma gondii					
34	Amebiasis	Entamoeba histolytica					
35	Ascariasis	Ascaris lumbricoides, roundworm					
36	Cryptosporidiosis	Cryptosporidium hominis, C.parvum, other intestinal protozoa					
37	Giardiasis	Giardia lamblia					
38	Hymenolepiasis	Hymenolepis nana, dwarf tapeworm					
39	Naegleriasis, Acanthamebiasis and Balamuthiasis	Naegleria fowleri, Acanthameba, Balamuthia mandrillaris					
40	Trichuriasis	Trichuris trichuria, whipworm					
4. Fungal infections							
41	Candidiasis	Candida species					
5. Chemical contaminants produced by living organisms							
42	Cyanotoxins	Cyanobacteria, bluegreen algae					
E. Water-washed (also water-scarce): Insufficient quantities of water for personal or domestic hygiene or institutional/occupational hygiene leads to infections							
1. Wound infections							
43	Tetanus	Clostridium tetani					
2. Enteric infections causing diarrhoea and dysentery							
44	Enterobiasis	Enterobius vermicularis, pinworm					
45	Gastritis	Helicobacter pylori					
3. Respiratory infections							
46	Influenza	Influenza viruses					
4. Skin infections							
47	Boils	Staphylococcus aureus					
48	Scabies	Sarcoptes scabiei					
49	Cellulitis	Streptococcus					
50	Leprosy	Mycobacterium leprae					
5. Eye and Ear infections							
51	Otitis	Streptococcus pneumonia					
52	Conjunctivitis	Haemophilus influenzae, Streptococcus pneumoniae and others					
53	Trachoma	Chlamydia trachomatis					
6. Lice- and Flea-borne Infections							
54	Typhus fever	Rickettsia prowazekii, Rickettsia typhi					
55	Plague	Yersinia pestis					
56	Relapsing fever	Borrelia recurrentis					
7. Nosocomial infections							
57	Puerperal sepsis	Staphylococcus aureus and Streptococcus spp					
8. Rodent transmitted infections							
58	Lassa fever	Lassa virus					
59	Hantaviral diseases	Hantaviruses					
60	Lymphocytic choriomeningitis	Lymphocytic choriomengitis virus					
F. Water-related (vector borne): Insects that breed in water or bite near it spread infections							
1. Mosquitoes							
61	Malaria	Plasmodium falciparum, P.vivax, P. ovale and P.malariae					
62	Dengue fever	Dengue virus					
63	Filariasis (lymphatic)	Wuchereria bancrofti, Brugia malayi, B. Timori					
64	Yellow fever	Yellow fever virus					
65	Mosquito borne viral encephalitides	Japanese encephalitis virus and others					
2. Tsetse flies							
66	Trypanosomiasis	Trypanosoma brucei					
3. Black flies							
67	Onchocerciasis	Onchocerca volvulus					
G. Distant water sources or lack of water when needed							

<b>1. Physical burden</b>						
68	Carrying heavy loads of water	n/a	n/a			
69	Exposure to faeces during disposal	n/a	n/a			
<b>2. Costs</b>						
70	Opportunity costs	n/a	n/a			
71	Financial costs	n/a	n/a			
<b>H. Water/sanitation in risky or isolated locations</b>						
<b>1. Natural risks associated with isolated water and sanitation facilities</b>						
72	Insects/pests	n/a	n/a			
73	Risk of drowning	n/a	n/a			
<b>2. Social risks associated with remote and isolated water and sanitation facilities</b>						
74	Harassment, bullying and rape	n/a	n/a			
<b>I. Perception of water and sanitation availability and consequent behaviours</b>						
<b>1. Behaviours due to real or perceived risk, stigma, damage to self-esteem, or disgust surrounding biological processes of defecation, urination and/or menstruation</b>						
75	Fear, social isolation and mental distress	n/a	n/a			
<b>2. Behaviours due to real or perceived availability of WASH</b>						
76	Reduction in water use, substitution in drinking, prolonged periods without urination and defecation	n/a	n/a			
77	Reduced use of health and educational institutions	n/a	n/a			

Shading indicates availability of evidence, which is further presented in Webtable 2. n/a – not applicable, searches for systematic reviews not conducted for domains G, H and I.